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10/081,027	02/21/2002	Roger Edward Kerns	MILL.001A	1646

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EXAMINER

Sotomayor, John

ART UNIT	PAPER NUMBER
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3714

DATE MAILED: 01/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/081,027

Applicant(s)

KERNS ET AL.

Examiner

John L Sotomayor

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and new claims 18-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 13-23 is/are rejected.
- 7) ☒ Claim(s) 10-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☒ Interview Summary (PTO-413) Paper No(s). 7.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Response to Amendment

1. In response to the amendment filed October 30, 2003, claims 1-17 and the newly added claims 18-23 are pending.

Drawings

2. The drawings were received on 30 October 2003. These drawings are accepted by the Examiner.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 6-9,17 and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Muckerheide (US 5,191,411).

Regarding claims 6 and 21, Muckerheide discloses a non-verbal communication system comprising a light emitting pointer mounted to an accessory worn by a patient (fig 2), a power source to supply the pointer with power and a switch to activate said pointer, and a display configured within the view of a patient and a caregiver with symbols configured to facilitate communication of concepts from the patient to the caregiver (Col 2, lines 34-57, Col 7, lines 23-36 and fig 2).

Regarding claim 7, Muckerheide discloses a non-verbal communication system wherein the power source is a battery connected to a light-emitting module via an electrical conductor (Col 7, lines 23-29 and fig 2).

Regarding claim 8, Muckerheide discloses a power housing that contains a power source in which the housing also contains an activation switch for said power source (fig.2).

Regarding claim 9, Muckerheide discloses a non-verbal communication system wherein the accessory to which the light-emitting module is attached is a hat (fig 4).

Regarding claim 17, Muckerheide discloses a non-verbal communication system comprising a light-emitting pointer mounted to an accessory worn by a patient (fig 2), a power source to supply the pointer with power and a switch to activate said pointer, and a display configured within the view of a patient and a caregiver with symbols configured to facilitate communication of concepts relating to medical care from the patient to the caregiver (Col 2, lines 34-57, Col 7, lines 23-36 and fig 2).

Regarding claims 22-23, Muckerheide discloses a non-verbal communication system comprising a light-emitting pointer mounted to an accessory worn by a patient (fig 2) wherein objects selected for communication include primitive symbolic indicia related to physical care (claim 22) (Col 2, lines 54-57) and the pointer device comprises a laser pointer (claim 23) (Col 7, lines 23-25).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muckerheide in view of Official Notice. Muckerheide discloses a non-verbal communication system comprising a light-emitting pointer mounted to eyeglasses worn by a patient (fig 2). The Examiner takes Official Notice that it is common and well known to use an O-ring for the attachment of devices to eyeglasses. Therefore, it would have been obvious to one of ordinary skill in the art to provide a non-verbal communication system comprising a light-emitting pointer mounted to eyeglasses worn by a patient as disclosed by Muckerheide with an O-ring for attachment to eyeglasses worn

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by a patient as taught by the Official Notice for the purposes of providing a patient with the greatest ease of use of the laser-emitting device.

7. Claims 1-5, 13-16 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muckerheide in view of Drumm (US 5,142,655).

Regarding claim 1, Muckerheide discloses a non-verbal communication system comprising a light emitting pointer mounted to an accessory worn by a patient (fig 2), a power source to supply the pointer with power and a switch to activate said pointer, and a display configured within the view of a patient and a caregiver with symbols configured to facilitate communication of concepts from the patient to the caregiver (Col 2, lines 34-57, Col 7, lines 23-36 and fig 2). Muckerheide does not specifically disclose that the communication device further comprises a chart. However, Drumm teaches a communication device attached to a person used for locating positions on a chart on a computer display (Fig 18). Therefore, it would have been obvious to one of ordinary skill in the art to provide a non-verbal communication system comprising a light emitting pointer mounted to an accessory worn by a patient as disclosed by Muckerheide and containing a chart for use with a communication device as taught by Drumm for the purposes of producing a system with greater efficiency in setup and coordination for the user.

Regarding claims 2, 3 and 5, Muckerheide discloses a non-verbal communication system comprising a light-emitting pointer mounted to an accessory worn by a patient (fig 2). Muckerheide does not specifically disclose that a chart associated with the system contains an alphabetical listing of Latin characters. However, Drumm teaches a communication device attached to a person used for locating positions on a chart on a computer display that contains an

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alphabetical listing of Latin characters (claim 2) and a plurality of graphic symbols with labels identifying said graphic symbols (claim 3 and 5) (Fig 18). Therefore, it would have been obvious to one of ordinary skill in the art to provide a non-verbal communication system comprising a light emitting pointer mounted to an accessory worn by a patient as disclosed by Muckerheide and containing a chart with a listing of Latin characters for use with a communication device as taught by Drumm for the purposes of producing a system that allows a user the flexibility in the form of communication.

Regarding claim 4, Muckerheide discloses a non-verbal communication system comprising a light-emitting pointer mounted to an accessory worn by a patient (fig 2) with a laser means operably attached to eyeglasses (Col 7, lines 30-36).

Regarding claim 13, Muckerheide does not specifically disclose that a chart displays a plurality of icons. However, Drumm teaches that a display chart on a screen presented to a user may have a plurality of symbols on the display and that those symbols may consist of alphanumeric characters and icons used to communicate concepts by the patient (claim 13) (Col 11, lines 13-48). Therefore, it would have been obvious to one of ordinary skill in the art to provide a non-verbal communication system comprising a light-emitting pointer mounted to an accessory worn by a patient as disclosed by Muckerheide with a chart that displays a plurality of symbols that consist of alphanumeric characters and icons as taught by Drumm for producing a system easily integrated with software displays available for handicapped persons.

Regarding claim 14, Muckerheide does not specifically disclose a system including labels corresponding to concepts to be communicated by a user. However, Drumm teaches that a software function, such as a telephone display, can be initiated with labels for the functions to be

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communicated by the user (Col 11, lines 33-48). Therefore, it would have been obvious to one of ordinary skill in the art to provide a non-verbal communication system comprising a light-emitting pointer mounted to an accessory worn by a patient as disclosed by Muckerheide including labels corresponding to concepts to be communicated by a user as taught by Drumm for producing a system in which a disabled user may communicate more rapidly with others.

Regarding claim 15, Regarding claim 1, Muckerheide discloses a non-verbal communication system comprising a light emitting pointer mounted to an accessory worn by a patient (fig 2), a power source to supply the pointer with power and a switch to activate said pointer, a display configured within the view of a patient and a caregiver with symbols configured to facilitate communication of concepts from the patient to the caregiver (Col 2, lines 34-57, Col 7, lines 23-36 and fig 2) aiming a laser beam at a display and causing a visible laser image to impinge on the display (fig1) and allowing a caregiver to view the symbol illuminated by the laser beam (Col 2, lines 34-57). Muckerheide does not specifically disclose that the communication device further comprises a chart. However, Drumm teaches a communication device attached to a person used for locating positions on a chart on a computer display (Fig 18). Therefore, it would have been obvious to one of ordinary skill in the art to provide a non-verbal communication system comprising a light emitting pointer mounted to an accessory worn by a patient as disclosed by Muckerheide and containing a chart for use with a communication device as taught by Drumm for the purposes of producing a system with greater efficiency in communicating the desires of the user.

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Regarding claim 16, Muckerheide discloses a system and method for non-verbal communication in which a laser-emitting means is directed at a display via body movement for the purposes of communicating the desires of a patient to a caregiver (Col 2, lines 58-67).

Regarding claim 18, Muckerheide discloses an apparatus for non-verbal communication between a patient and a caregiver using a patient-directed laser-emitting means pointing to a display containing symbolic indicia for communication (Col 2, lines 47-57). Muckerheide does not specifically disclose that the communication device further comprises a chart. However, Drumm teaches a communication device attached to a person used for locating positions on a chart on a computer display (Fig 18). Therefore, it would have been obvious to one of ordinary skill in the art to provide a non-verbal communication system comprising a light emitting pointer mounted to an accessory worn by a patient as disclosed by Muckerheide and containing a chart for use with a communication device as taught by Drumm for the purposes of producing a system with greater efficiency in communicating the desires of the user.

Regarding claim 19, Muckerheide discloses a non-verbal communication system and apparatus comprising a light-emitting pointer mounted to an accessory worn by a patient (fig 2) wherein objects selected for communication include primitive symbolic indicia related to physical care (Col 2, lines 54-57).

Regarding claim 20, Muckerheide discloses a non-verbal communication system and apparatus comprising a light-emitting pointer mounted to an accessory worn by a patient (fig 2). Muckerheide does not specifically disclose that the communication device further comprises a chart wherein a plurality of images that are grouped adjacent to one another on said chart. However, Drumm teaches a communication device attached to a person used for locating

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positions on a chart on a computer display containing a plurality of images that are grouped adjacent to one another on said chart (Fig 18). Therefore, it would have been obvious to one of ordinary skill in the art to provide a non-verbal communication system comprising a light emitting pointer mounted to an accessory worn by a patient as disclosed by Muckerheide and containing a chart on a computer display containing a plurality of images that are grouped adjacent to one another on said chart as taught by Drumm for the purposes of producing a system for swiftly communicating the desires of the user.

8. Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muckerheide in view of Toussaint et al (US 5,255,167). Muckerheide discloses a non-verbal communication system and apparatus comprising a light-emitting pointer mounted to an accessory worn by a patient (fig 2). Muckerheide does not specifically disclose a dimmer switch to vary the intensity of the light of the laser beam (claim 10) or a hole in a housing to access the switch (claim 12). However, Toussaint et al teaches that the laser beam of a laser-emitting device attached to a human may be dimmed and varied in intensity using an adjustable lens device (Col 4, lines 15-29). The Examiner also takes Official Notice that placing an opening, such as a hole, in a housing to provide access to a component internally located is a common and well-known means for accessing an internal component. Therefore, it would have been obvious to one of ordinary skill in the art to provide discloses a non-verbal communication system and apparatus comprising a light-emitting pointer mounted to an accessory worn by a patient as disclosed by Muckerheide with a dimmer switch to vary the intensity of the light of the laser beam accessed through a hole in a housing to access the switch as taught by Toussaint et al and the Official

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Notice for the purposes of minimizing the risk of damage to a caretaker's eyes from a laser beam that is maintained at an intensity that is sufficient to cause such damage.

Response to Arguments

Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sears et al (US 6,115,482) for a discussion of laser-emitting means attached to a human for reading graphic and textual imagery from a display.

Fuhr (us 5,954,674) for a discussion of gathering of biometric data using laser-emitting means attached to a human.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John L Sotomayor whose telephone number is 703-305-4558. The examiner can normally be reached on 6:30-4:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Hughes can be reached on 703-308-1806. The fax phone number for the organization where this application or proceeding is assigned is 703-746-8361.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4558.

jls
January 8, 2004


S. THOMAS HUGHES
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700